

trimmers, who scrape off all projections, and fill up all depressions which may have been left in the operation of smoothing, and then wash them with what is technically termed enamel. This is composed of various substances, more fusible than the tooth itself, and answers the place in common porcelain making. It is ground to a fine powder, and suspended in water, and is laid on with a camel's hairbrush. They are now sent to the gunners, who apply the gum. This is chiefly composed of oxide of gold, and is applied in the same manner as the enamel. After being dried, they are burned. This operation is carried on in a muffle. The teeth are placed on a bed of crushed quartz, which is placed on a slab of refractory clay. After being exposed to an intense heat for some hours, they are taken out, cooled, and assorted.

DISINFECTING PASTE FOR DRESSING WOUNDS.—Prof. Grace Calvert has published a note concerning a disinfecting paste lately brought into use in Paris for the dressing of wounds, pointing out that as coal-tar is one of the ingredients of the paste which probably will be used in the hospitals of other countries, it is important to be well informed as to the kind of tar; he shows that there is an extreme variation in the composition of coal-tar, while the tar of Newcastle coal is almost exclusively naphthalene, that of Boghead coal is paraffine, and that of Wigan canal coal is barine and carbolic acid. In short, there appears to be a difference in each kind of coal experimented on.

Of the substances above named, carbolic acid has remarkable antiseptic properties; dead bodies injected with a weak solution of it may be kept for dissection several weeks, and a piece of horseflesh, dipped in the acid, and hung up exposed to the weather, kept for more than three years without decomposition. The paste referred to is composed of one hundred parts plaster of Paris, and three parts of coal-tar. When applied to wounds, it immediately neutralizes the sickening odor of even the most offensive. Tar has long been known and used as an antiseptic; and in the last century, Bishop Berkeley wrote a treatise to demonstrate the medicinal virtues of tar-water.

MORTALITY IN DIFFERENT TRADES AND PROFESSIONS.—The Edinburgh Review, of a recent date, contains an article on the mortality in trades and professions. The Sheffield grinders occupy a conspicuous place among the artisans whose health is destroyed by the employments that yield them the means of subsistence; the most deadly occupations pursued in Sheffield are fork-grinding and stone-grinding. The mortality is very large among those who labor in the coal mines, and larger still in the metalliferous mines. Consumption makes fearful ravages among the tin, copper, and lead mines of Cornwall and Derbyshire. The smooth substance at the end of the lucifer match is the cause of intense suffering and slow death. This composition is composed of phosphorus combined with oxymuriate of potash and glue, made into a paste, and kept liquid by being placed over a heated metal plate. The subtle vapor given off is charged with a poison that destroys the bones of the jaw by a succession of cancerous sores, reduces the operator to a skeleton, unhinges his nervous system, and produces ghastly paleness. Brass-makers suffer from attacks of intermittent fever; paralysis smites the plumbers; filers of brass and copper-smiths are subject to a most peculiar affection, their hair turning a livid green. The mortality by consumption is greatly increased by tailors, bakers, and milliners, also by compositors.

TREATMENT OF CROUP.—The Dublin Hospital Gazette states that Dr. Jodin, in a communication to the Academy of Sciences, on the nature of croup and on the treatment of the same, says that his researches have led him to the following conclusions: First, that croup and pseudo-membranous angina are merely parasitic diseases, due to the formation of fungi; second, that the treatment of these affections requires neither general medication nor incendiary cauterizations, and that they may be cured by simple parasiticidal applications. After enumerating the various therapeutical means resorted to in this and analogous diseases, Mr. Jodin declares that he much prefers to these, uncertain, alarming, or dangerous remedies, the esquisichloride of iron, which completely impregnates the fungus, exercises its action on the surface only, and may be absorbed without danger. This medicine destroys the parasitic growth, and also modifies favorably the hemorrhagic condition constantly observable in the affected parts and their neighborhood; it further induces expectoration, and thus promotes the rejection of the false membrane.

HYGROMETRIC THEORY OF CHOLERA.—M. de Ruolz, well known for his important discoveries in the art of electro-gilding, is the author of an interesting series of facts, communicated to the Cercle de la Presse Scientifique of Paris, regarding the proportion of moisture contained in the atmosphere during the prevalence of cholera. By analyzing the various statistical data collected during the French epidemics of 1832, 1849, and 1854, M. de Ruolz has deduced the following facts: In 1832, the epidemic in Paris reached its height in April, when the hygrometer was lowest; it declined to the utmost in September, when the hygrometer was highest. In 1849, the hygrometric observations at the Observatory of Paris had been unaccountably neglected; but in 1854 afforded results quite in accordance with those of 1832. Hence M. de Ruolz infers that there undoubtedly exists a positive coincidence between the intensity of the epidemic and the hygrometric state of the atmosphere; the former being in the inverse ratio of the humidity of the air. Other circumstances he considers to point to the same conclusion; thus, Lyons, a city remarkable for its damp atmosphere, owing to the two rivers that embrace it, has never been visited by cholera.

INFLUENCE OF COCA-LIN OIL AND COCA-NUT OIL ON THE BLOOD.—Dr. T. Thompson, in a paper read before the Royal Society, states that he found, during the administration of cod-liver oil to phthisical patients, their blood grew richer in red corpuscles. The use of almond oil and of olive oil was not followed by any remedial effect; but from cocoa-nut oil results were obtained almost as decided as from the oil of the liver of the cod. The oil in question was a pure cocaine, obtained by pressure from crude cocoa-nut oil, as expressed in Ceylon and the Malabar Coast from the dried cocoa-nut kernel, and refined by being treated with an alkali, and then repeatedly washed with distilled water. It burns with a faint blue flame, showing a comparatively small proportion of carbon, and is undrying. The whole quantity of blood abstracted, for analysis, having been weighed, the coagulum was drained on bibulous paper for four or five hours, weighed, and divided into two portions. One portion was weighed, and then dried in a water-oven, to determine the water. The other was macerated in cold water until it became colorless, then moderately dried, and digested with ether and alcohol, to remove fat, and finally dried completely, and weighed as fibrin. From the respective weights of the fibrin, and the dry clot, that of the corpuscles was calculated.

DISEASE CAUSED BY IMPERFECT VENTILATION.—The evil results of an insufficient supply of air are not exerted merely through the imperfect oxidation and elimination of the substances which are undergoing decomposition within the system—for the same cause will operate to confine the putrescent effluvia that are given off, as such, from the lungs and skin, which will produce the effect upon the individuals habitually exposed to them, as if these were generated from some external source. It was ascertained by the experiments of Collard de Marigny, that the fluid exhaled from the lungs is by no means pure water, but contains as much as three parts in one thousand of organic matter. If this fluid be kept in a closed vessel, and be exposed to an elevated temperature, a very putrid odor is exhaled from it; and more recent experiments show that its putrescence depends on the decomposition of an albuminoid substance. There is every reason to believe that the fluid exhaled from the skin is charged with a very similar substance; its presence being indicated by the foul odor of garments that have been too long

worn. And thus imperfect ventilation becomes the means not only of preventing the due elimination of decomposing matters from the body, but actually of reintroducing their poison as products into the blood by the very process which was designed for the purification of the vital fluid.

THE OPIUM TRADE OF INDIA AND CHINA.

The Portuguese have the merit, if we are to regard it as such, of having commenced the trade in opium between India and China. A hundred years ago it was of very trifling extent, and it was not until after the British East India Company made an adventure in 1773 that it gave promise of becoming a large trade. For many years the quantity shipped from British India did not much exceed 1,000 chests per annum, and even so late as the year 1820 it did not quite reach 6,000 chests, or about 900,000 lbs. Since that time, however, notwithstanding that the Chinese have latterly largely cultivated the plant from which it is produced, their imports of opium have rapidly increased. At the present date it amounts to between 10,000,000 and 11,000,000 lbs. annually from India, beside a small amount from Turkey. The opium produced in India is the concrete juice of the white poppy. The capsules, when green, are incised with a knife, with three or more blades, which is drawn along when during the hottest time of the day; the white juice exudes from the wounds and concretes into opium, which is scraped off the next morning. If the night dews are heavy, or if rain falls in the interval, the quality of the drug is much impaired. The opium when collected is put into jars for transportation to the factories, where it undergoes a process to purify and prepare it for the market. About the end of March, and for some weeks after, these jars begin to arrive at their destination, and the contents are thrown into large vats, from which the mass is distributed to be made into balls. When dry, the balls are packed for sale in chests, in two layers of six each, with dried stalks, leaves, and capsules of the poppy plant. A chest of Bengali opium contains 160 pounds, and one of Bombay 140 pounds. The right to manufacture opium in India is monopolized by the Government. The cultivation of the plant from which it is produced is rigidly restricted to two districts in the Presidency of Bengal, and a semi-independent native State in Western India. The Bengal opium is exported from Calcutta, and the other, known in the trade as Malwa opium, from Bombay. Calcutta and Bombay are the only ports from which opium is permitted to be exported, and the quantity shipped at the former is about double that at the latter. In the favored Provinces in Bengal, where the poppy plant is allowed to be grown, the Government servants grant licenses to cultivators of the soil to plant certain grounds, and afterward receive the juice from these people at a stipulated fixed price. As Malwa is an inland State, and has consequently no seaport, its opium pays a duty to the British Indian Government of about \$60 a chest upon exportation from Bombay. At Calcutta, there are regular periodical auction sales, where the opium is sold at so much per chest to the highest bidder; and so careful were the East India Company to keep up the character of their brand in the market, that previous to sale all cases were opened by examiners appointed for the purpose, and any balls of opium that had the slightest appearance of impurity or decay were removed, replaced, and destroyed, and the box resealed. The purchasers at these auctions are of all races and countries. There may be seen the acute citizen of the United States, the portly native of Hindostan, and men in strange costumes, that have sailed in their own ships, and brought with them strange coin, from the ports on the shores of Iranistan and Arabia. You may see also creeds-Christian and Pagan, Mohammedan and Jew, and last though not least, from the importance of their presence, the brokers of English merchants who count their capital by hundreds of thousands of pounds sterling, and own lines of steamers and sailing vessels. When the opium is sold it is kept in bond by the Government, and only allowed to be removed to the ship on which it is to be sent out of India under the leave of a customs officer, who delivers it to another aboard, whose duty it is to remain by the vessel till she finally proceeds to sea. At this stage of the traffic the Government of India have finally done with all interference or control over the article, and it may be taken wherever the owner may think fit.

If we were to credit the policy of the powers that rule in China, it would appear that it is their ardent wish entirely to abolish the use of opium among the 350,000,000 of people subject to their will. In that Empire the importation of opium is by law strictly prohibited, and by existing treaties with America, England, and other countries, any of their respective citizens, or subjects, that may be unfortunate enough to be caught with the drug in their possession in Chinese waters, or on Chinese ground, are left entirely at the mercy of the Celestials to be dealt with by their laws. The actual practice of the trade, however, is very different from what we might suppose it to be from this regulation. There is in reality no more risk incurred in introducing opium into China than there is here in importing in a legal manner any of the articles upon which a duty is levied by the customs. To understand this more clearly, let us suppose that the Government of the United States, with the double view of increasing the revenue of the country and of affording their servants superior facilities for growing rich by extortion, were to pass a law and make treaties with foreign Powers prohibiting the importation of tobacco into the Union, under the penalty of death to all who should be caught attempting to evade it, and at the same time privately permit the various collectors of customs to sell permits to those who were willing to pay highly for the privilege of landing and distributing the contraband article in safety. This supposition is a parallel case with the practice in China with regard to opium. It is quite an error to suppose, as is generally done, that the drug is smuggled or taken into China in open defiance of the authority of the executive power of the country. There are receiving ships carrying various flags—some American—well armed and manned with Malays and natives of Manila, moored in convenient harbors on the coasts of China, and when a steamer or "opium clipper" arrives from India, it is into these storerooms that her cargo is delivered, and receipts or certificates regularly granted, which are sent to the owners of the drug wherever they or their agents may transact their business in China. In trade these certificates are considered unquestionable, and are transmitted from one to another with the greatest facility. Chinese dealers from ports on the coast, and the interior, when they happen to want a supply of opium, purchase scrip for what they require, and send their own boats, or sometimes junk, or steamers of light draft of water, to take it from the receiving ship and convey it to whatever port they intend to land it. At this particular stage of the traffic, as a general rule, all foreign interference with the trade may be said to end, though a few "barbarians" are engaged in the very profitable business of distributing the opium in the country to those who directly retail it to the consumers. When a lot, of one or more chests, is purchased, and intended to be landed at some particular place, the purchaser makes arrangements with the Mandarin in authority for his permission to transact the business unmolested. As may be imagined, there is no fixed rate for this permission, and it varies much with the necessities of the case, but is always the uttermost dollar that the greedy official finds it possible to extract. The captain of an American steamer, who had been employed by the native dealers for some time in conveying opium from the receiving ships to Canton, and who had made several profitable ventures on his own account, came to the conclusion that he could do equally well without the assistance of the Government people, and that he would pay no more black mail. Without letting any of them know his intention, he took a considerable quantity of opium aboard and proceeded to Canton, where he landed it without being questioned in any way. He returned, took in a second cargo, and pro-

ceeded up the river as before, but no sooner had he anchored his vessel above the European factories, than he was boarded by two large launches with upward of eighty Chinese soldiers and two inferior Mandarins to take possession of his ship. The captain, however, was not thrown off his guard by his former good success, but was fully prepared to receive his visitors, knowing well that should they get possession, both ship and cargo would be confiscated, and himself and crew left entirely at the mercy of the captors—or in other words, that unless a large ransom were forthcoming they must pay it with their heads. Steamers engaged in this trade, and in the somewhat more precarious one of carrying Chinese passengers, have strong platforms erected across the wheel-houses, where in other vessels a plank is usually placed, called the captain's bridge. These platforms are guarded by strong bulwarks, steering apparatus is fixed on them, the arm-chests, and usually carromades placed so as to rake the deck below fore and aft; the engine-room hatches are well secured with iron gratings, and means are provided for telegraphing orders to the engineer. It is, in fact, a little citadel from which the crew of a steamer can direct her movements long after her decks are in possession of an enemy. The captain, being on the alert, and having seen the boats with the soldiers coming, had mustered all hands in this little fort, except one left below to knock out the shackle-pin and free the vessel from her anchor, when all was ready. When the last man of the two boat-loads was on the deck, the engineer received his orders to turn ahead, and away went the steamer with the whole posse, who had been so certain of their prize that in their astonishment they made no attempt at resistance. The captain proceeded straight to the Portuguese settlement at Macao, some hundred miles distant, and brought up under the guns of one of their batteries, where he descended to the angry Mandarins, and expressed a hope that they would not take for any want of courtesy toward them his absence while he was attending to the duties of his ship. He informed them that the fare down was two dollars per head for themselves and attendants, and that when his claim upon them for that amount was satisfied, they had his permission to go about their business. The steamer had to remain at Macao till he made his peace with the offended officials at Canton; but that was not difficult when he paid the full amount which they considered themselves entitled to upon the former cargo, besides for what he had aboard, and a fine as a caution for his future conduct.

There is, perhaps, no other commercial business in the world that excels the opium trade in facility for making or losing a fortune. The total capital employed in it is very large; and some of the mercantile firms engaged in the trade are almost fabulously rich, and enterprising to a degree that would be thought rash elsewhere. On account of the great value and perishable nature of the drug, it has always been a matter of the first importance to employ the fastest vessels procurable in its conveyance from India to China. The transit, however, is now almost entirely carried on by means of steamers. Some few years ago, when all the boats on the line belonged to one steam navigation company, and their directors thought fit to raise the freight per chest from \$14 to \$15.50, two mercantile firms built at once, with their own capital, superior vessels to those employed, and started a line each in opposition. These steamers must have cost \$300,000 each; and perhaps it would be difficult to find elsewhere merchants who could afford, without previous preparation, to withdraw such large sums from their working capital, and not even show the slightest appearance of inconvenience. Not long ago, a firm devised a plan for sweeping the opium market, that would be no discredit to the acquisitive ingenuity of Barnum. At the time of the operation they had a considerable stock of opium in China, beside which they bought largely in India, and loaded and dispatched two of their own vessels. Ships bound from India to China in the season of opium freights, to take advantage of the prevailing monsoon in the China Sea, always pass through the Straits of Malacca and Singapore, calling at the latter place, which is a sort of halfway house for them. There is a large Chinese population at Singapore, and of course a considerable demand for opium. When the two vessels in question reached that place, on their way to China, they found orders waiting for them to unload there, and sell their cargoes by auction without reserve. The quantity of opium brought by them was many times greater than the demand, and traders at that place were quite unprepared with funds for such an unexpected contingency. Besides, the very fact of a firm like that to which these cargoes belonged trying to force a sale, at any sacrifice, convinced the most skeptical that something dire was pending over the opium market—noting less, perhaps, than free-trade in its production in India. When the cargoes were advertised, with a due notice of sale, those who held moderate stock of opium, suited to the Straits markets, hurried forward sales so as to anticipate the other and realize what they could before the market became entirely glutted. The effect of this was that opium was to be had for a mere percentage of its original cost in India, and the private agents of those who had caused the depression purchased all they could get, and afterward bought in the two cargoes at a nominal price. While this was going forward at Singapore, the firm acted a like part in China, and forced sales with the same result. When news came from Singapore of the low prices ruling there, opium was, in more senses than one, a complete drug. Very few had foresight sufficient to retain their stocks, much less to purchase, and the private agents were again at work and bought till the market was swept and the opium had nearly all found its way into the hands of the originators of the panic, who were safe from competition till the crop of the following season found its way to China. In due time the two vessels arrived safely with full cargoes from Singapore, prices went up higher than they had ever been known before, and some of the senior partners in the successful firm retired on splendid fortunes to their native land, which was generally supposed to lie in some latitude north of the River Tweed.

The principal use which the Chinese make of opium is to smoke it with tobacco, which produces a languor said to be exceedingly pleasing. The evil effects of this have been generally very greatly exaggerated. It is only in its abuse, as with many of the good things of this world, that leads to the complete annihilation of frame and prostration of faculties that are said to characterize all who follow the practice. Hundreds of thousands of Chinese continue to smoke opium for the term of their natural lives without any apparent injury to mind or body. In the smoking saloons of Canton, opium is retailed to customers at its weight in silver; the metal is put in one scale and the drug in the other, and weight for weight exchanged. It will therefore be apparent that, in a country where money is of so much value, it is only the richer portion of the population who have means to carry such an expensive luxury to excess. There is no room to doubt that if the Government of India abandoned the opium monopoly and allowed the drug to be produced freely all over Hindostan, that the Chinese consumption would thereby be greatly increased, as well as the injurious effects which it is said to occasion. Much is said, without any good show of reason, against the Government of India for the part it performs in the trade. Indeed, some of those, in England and elsewhere, who are loudest in denouncing against the traffic, appear to be totally ignorant of the real bearings of the case. India derives a revenue of some \$20,000,000 per annum, which is every cent extracted out of the pockets of the smokers, and the system so much abused actually assists to obstruct the demoralization of the Chinese. It would be as reasonable to censure the ruler of France for permitting brandy to be made in that country, and to say that he was demoralizing people in other parts of the world by laying such an export duty upon it as might raise its selling price to consumers to about \$20 a gallon.

The interesting facts contained in the above communication in relation to the opium trade are not diminished in value by the conclusions which

the writer comes to as to the morality of the traffic. It is proper to add that for these *THE TRIBUNE* is not responsible, nor do they meet with its approbation. The use of opium, whether in moderation or excess, we believe to be even more pernicious than the use or abuse of ardent spirits. *Ed. Trib.*

MR. CONGER'S FIRST STOCK SALE.

Considering all the circumstances, the Hon. A. B. Conger has reason to congratulate himself on the result of his first experiment in selling stock by auction. We say considering all the circumstances, for it must be recollected that he is comparatively unknown as a breeder, the animals offered were by no means of first quality, the pneumo-pneumonia panic has shut off the principal market, the place is difficult of access, and money is not very plenty among the farmers of the Western country. Mr. Wainwright, with an established reputation, a first-rate lot of stock, and a good location, utterly failed to attract buyers to his sale week before last, and only sold one animal except those for which he held previous orders; and yet Mr. Conger disposed of every one of about seventy lots on his catalogue, and has weeded out his herd in a satisfactory manner. True, the prices realized were small, if we consider the average amount paid for Thorne's, or Alexander's stock, but the quality was no more than fair, and the number of bidders far less than are attracted to the annual sales at Woodburn.

We were sorry to learn from prominent breeders on the ground on Wednesday, that the pneumo-pneumonia panic is striking so rapidly through Ohio and other distant States, as to interfere with sales of blooded stock in this section. The force is even carried so far that Ohio breeders dare not introduce our purest blooded and healthiest stock into their State for fear of their neighbors; and no doubt a short-sighted policy of exclusion may be attempted in more distant States. This is undoubtedly keeping Western men away from our Eastern stock sales. Our views in respect to pneumo-pneumonia are well known, and no one will charge us with underestimating the terrible nature of the contagion, but we appeal to the common sense of the Western farmers and breeders not to act so foolishly. The cattle disease exists in certain townships in Massachusetts, and may have reached New-Hampshire and the borders of Connecticut, although this is denied by very intelligent cattle men, but there is no evidence to show that a single diseased animal has brought it this side of the Connecticut River, nor that such is likely to be the case. The probability of its breaking through the cordon prescribed by the recent stringent laws of Massachusetts, is so extremely small that we hope to hear no more of the ridiculous panic which seems to have taken hold of the Western people. New-York, Ohio, Illinois, and all the States west of New-Jersey may be for their cattle premiums as usual with perfect safety, only provided that Massachusetts stock be excluded from competition.

Access is had to "Waldberg"—Mr. Conger's scene near Harvest—by boat from this city, or by railroad to Conger's Station on the Hudson River. One o'clock was the hour appointed for the sale, but a few strangers had gathered at the stables as early as 10 o'clock, and increasing by twos and threes at different times, the company was increased to the number of 80 or 90 up to 10 o'clock, at which time, to the evident satisfaction of all, lunch was announced to be spread in the grove near the stables. The company fell to with a will, and after doing ample justice to the eatables, and passing high encomiums upon the cider, adjourned to the sales-ring, which was placed in a shady place hard by.

An unusual number of prominent breeders and farmers were in attendance. Among them we noticed Col. Lewis, G. Morley, and his brother James Samuel Thorne, C. S. Wainwright, the Hon. Wm. Kelly, who is happily quite recovered from the effects of his late accident, Col. B. P. Johnson, John Jay, E. G. Fells, Jas. Brodie of Watertown, Luther H. Tucker, Lewis B. Brown, owner of the pretty yacht Irene, Mr. Campbell of Oneida County, R. Bradley of Brattleboro', Vt., Geo. C. Hall, a great horse fancier; the Bathgates, Henry Wood and R. Mott Underhill of Westchester County, and a number of others.

The arrangements were not entirely perfect, probably owing to this being a first sale, and one day after another occurred, so that it was about 2 o'clock when Mr. Leeds mounted his platform in the ring, and called to order. Mr. Leeds is apparently almost as good a judge of pedigree and points as Col. Jim Miller, but he is a capital auctioneer and made the most of the bidding material round the ropes. A few words of preface from him relative to the conditions of sale, and at his call lot No. 1 is led into the ring. This was Jessie 3d, a tolerably good aged Ayreshire cow, in calf to Mr. Conger's imported Erie, and got by Marmion 2nd out of Jessie, a cow imported by Mr. Thom the sculptor. She was started at \$40 by Mr. John Jay, and after a brief competition by two or three bidders, went to him at \$75. The same gentleman got the next lot, Jessie 4th, for \$80, and a better bargain than the other, for she is five years younger, and possessed of quite as good points. Nina, the third lot, got by Eric out of Norma, an imported cow, was knocked down at \$55 to Seneca Daniels of Saratoga Springs, who made here a first dip into what turned out to be a large lot of bargains. Then followed a couple of grade Ayrshire and Durham heifers, one of which was sold for \$45 to T. L. Seymour, and the other for \$30 to Henry Wood of Mount Kisco. The Ayrshire bulls were not much to speak of, and brought prices accordingly, one going at \$30 to E. G. Armstrong, and the other at \$30 to S. Daniels.

The Devon cows and heifers came next. Deva, a three-year old of Mr. Conger's breeding, and descended from the Paterson of Maryland stock, is a pretty cow, with a nice udder, and at \$40 went good cheap to Daniels. Giulia (1828) an English Friesian animal, of better blood than Deva, was struck off to Mr. A. R. Frothingham of West Park, for \$87.50, but after this Daniels had the field to lot 28, with the exception of 18, a two-year old bull, of which Mr. A. Davidson became the happy possessor at \$22.50, and 30, a short-horn four-year old cow of Bathgate's breeding, which fell to E. C. Armstrong for \$42.50. Mr. S. Daniels, therefore, got of the Devon cows beside the one specified above, lot 10 for \$45, and of the bulls, lot 12 for \$17.50, lot 13 for \$32.50, lot 14 for \$27.50, lot 15 for \$7.50, lot 17 for \$10, lot 19 for \$10, lot 23 for \$17.50, lot 27 for \$12.50, and beyond this our notes are defective. The regular system of the catalogue was not strictly followed, as the animals had not been ranged in order conveniently near, but to avoid delay the numbers were for a time replaced and transposed confusedly together.

Lot No. 24 was Bonquet, a red and white short horn heifer, bred at Waldberg, and having, with the single exception of the bull Jacinth's Romeo, much the best pedigree on the list. She is not exactly what would be called a first-class heifer herself, but very well bred, and of more value to a breeder than that account. There was a little dragging in the bids about it is time, owing to one cause or another, and the heifer went to Mr. F. G. Fraser, a neighbor of Mr. Conger's, for \$65, although more money might have been obtained if time had not been so precious. Mr. Fraser likewise bought lot No. 26, Elba, a two-year-old of short pedigree, for \$45; and lot No. 29, a three-year old, of Mr. Charles Bathgate's breeding, for \$47.50. Fair Star, lot No. 32, (probably not called after Miss Agnes Robertson), and a good long pedigree, and was rather fair to look upon, but did not have a coat of hair quite up to our notions of length and silkiness. She was started at \$30, and the competition up to \$85 was quite refreshing, but Mr. Frothingham topped it with a quarter eagle, and got the prize. Mr. Daniels, who had been buying right and left, and scarcely giving way to Mr. Frothingham in the Fair Star bidding, struck in for lot No. 33, Fanny, a white roan heifer, whose sire was named in a rather peculiar manner, as any one may see by reference to the misprint in the catalogue. The buyers present did not seem to fancy Fanny—at least

we infer from the fact that Mr. Daniels got her for \$60 even. Mr. John Jay made a good investment in the purchase of lot No. 34, Fashion, a pretty yearling heifer of Bathgate's breeding, which was knocked down to him at \$27.50.

More money was got for lot 39, Lilac Blossom, a roan cow, said to be a good milkier, and well forward in calf to Marathon, than for any other horned animal on the list. She was started at only \$20, but the bids came thick and fast, and in a few minutes the ticklish point of the even hundred was passed, and, by five and quarter eagles, the price mounted to \$122.50, at which the invincible Daniels got her. This gentleman, we learn, intends taking his stock across the Plains to California, next Spring, and expects to realize something handsome from the venture. No doubt he will do so, unless Lilac Blossom and her male and female associates go down the irreverent throats of the Apaches or Pah-Utes on the way, or are seized as "Gentile tithes" by the Great Mogul at Salt Lake City.

So went Mr. Leeds wearily through all the lots of females, until he reached the class of short-horn bulls, when we adjourned to the stable-yard, and the great heavy animals were led out in turn. Messenger, lot 49, a six-year old roan bull, rather ragged build, was not much appreciated, since the single bid of \$50 offered by Mr. Fraser found no competitors; and Suffolk Hero, although a large animal, was deemed small potatoes, for he only brought \$60, or about three cents a pound, as near as we could estimate him. Jacinth's Romeo, by Romeo out of Jacinth, has a good deal of first-rate blood in him, comprising several crosses of Favorite, and some Hubback, Foljame, and Phenix strains, but bulls were not much in demand, and Mr. Fraser got him for \$100 without much trouble, and very cheap. Four more bulls were sold, and then came the pigs—Berkshire first, and Suffolks after it. Of the first breed, Mr. Jay got a neat pair for \$5, Col. Morris one for \$6, Bathgate one for \$9, and W. B. Hartle the remaining pair for \$6. Fraser took all of the four pairs of Suffolks, at an average of \$5.50 the pair.

Only three lots of horses were offered, one a stallion, and two mares. The stallion, a Tom Crib colt out of a Friday mare, only three years old, a dark bay, well ribbed up, with a good head and first-rate leaders, and said to have good speed for a green horse, went to Charles W. Bathgate for only \$110. He is worth that money to put before a clam cry in the city. A nice, trim, and stylish little mare, Mad Kate by name, of Mr. Conger's breeding, and by Lone Star out of Bettie by Henry, can trot in 3:05, but was knocked off to Mr. Fraser for \$110; and her mate Jenny, by The Wormley II., out of a Turk mare, would have been cheap at \$250, for her half brother sold for \$700, and she is claimed to trot in 2:58. She is better behind than Kate, and seems to have more bottom; but although Mr. Fraser seemed determined not to part the team, she was passed into his hands for only \$210, without much opposition.

The whole sale figures up to little short of three thousand dollars, which, as we said before, was, under all the unfavorable circumstances of the case, not a very bad result. We presume that it will be an inducement to Mr. Conger to repeat the experiment at Waldberg a twelvemonth from this time.

THE FRUIT CROP.

We have never seen in the vicinity of New-York, a fairer show, present and prospective, of a fruit crop than we have for the year 1890. The strawberry crop, which is about two months in its time of harvesting, has not been unusually productive of quantity, but it has in quality of the fruit, particularly of the most approved new sorts. We have heard no complaint this year about the soundness of the Wilson Seedling. On the contrary, it is everywhere gaining in favor—and its productiveness, even in such a dry time as we have had, just in the bearing season, is marvelous. From one rod square, any family may have a daily supply for all the month of June.

Cherries never have been so abundant, nor of better quality, since the commencement of the failure of this kind of fruit, a few years since, in consequence of the great increase of the acreage, which for some years has nearly spoiled all the fruit of the finest varieties. This year the trees are loaded, and the fruit is large and luscious. We have frequently heard the remark this year, in regard both to strawberries and cherries, that the food principle has been remarkably well developed. Some years these berries are mere masses of sour water, and tough skins and seeds surrounded with bitter pulp. This year it has been common to hear remarks like this: "Oh, I would make my breakfast of such fruit."

Plums have for many years been so entirely destroyed by the curculio that a great many persons have entirely given up all attempts to grow them. A few persons have persevered in trying to preserve their trees, and this year they are likely to be rewarded.

Peaches have failed, almost entirely, over a great extent of country where they once gave great crops of good fruit. Numerous farms now are wholly destitute of peach trees, where they once flourished most luxuriantly. This year we hear of better prospects than before for many years, where there are a few trees remaining, and we begin to hope that the diseases which have prevented the production of this most delicious of all fruits, in its ancient glory, may be passing away. From the great peach field of New-Jersey, Delaware, Maryland, and further south, we expect a better supply this year than for several years past.

Pears, which have not been of late what they were in the good old time, give a fair promise this year; the curculio has not destroyed them as much as usual.

Apples hang upon the limbs in such profusion that the trees will be sure to be broken with their overloads, or greatly injured, unless their owners take the precaution to strip off about half the quantity now growing, by which the quality would be improved, and the crop not much diminished, and injury to trees prevented.

Of the smaller fruits there will be no lack. Currants are now ripening; gooseberries are full; so are raspberries; and blackberries, by their abundant blossoms, promise a most abundant yield.

In almost all the things that furnish food to man we certainly never have had a more promising season.

THE PIKE'S PEAK RAILROAD.

To the Editors of *The Chicago Press and Tribune*.—GENTLEMEN: The bids for the Pike's Peak mail route, established by the present Congress, were decided this morning, as follows:

No. 15,151—From Galeburg, Nebraska (on the Salt Lake mail route), up the South Platte, by St. Vrain, to Denver City, 240 miles and back, once a week. For this there were seventeen bids, ranging from \$19,000, the contract for this became the postmaster of that city, the Butterfield Overland Company, down to \$8,001 by E. F. Bruce of St. Joseph, Missouri, who is the successful bidder. The two next lowest bids were \$2,400 each. Mr. Bruce's bid is guaranteed by two citizens of St. Joseph, whose pecuniary responsibility is guaranteed in the strongest terms by the postmaster of that city. It will do all the branch lines from that place through the mines, depends on the service on this route being faithfully performed. The Department assured me that they would see to it that Mr. Bruce should carry the mail, and of course, if his guarantees are reasonable, the contract can be enforced, as by law they have to pay all the cost of carrying the mail, if the contractor fails to do it.

The estimate of the Post-Office Department for this route was \$19,200 per year. I should have added that Mr. M. S. Alvord, a Leavenworth banker, who is or has been connected with Mr. Russell of the Pike's Peak Express, and the Pony Express, put in a bid at \$14,750.

No. 15,152—From Denver, by Hartsdale to Colorado City, 68 miles, weekly. For this there were fourteen bids, ranging from \$8,150 down. Let to H. G. Winkler at \$360.

No. 15,153—From Denver to Bunker, 40 miles, weekly. For this there were thirteen bids, from \$2,000 down. Let to M. G. Smith at \$941.

No. 15,154—From Denver, by Haden and Tarryall, to Breckenridge, 100 miles, weekly. For this there were twelve bids, from \$10,000 down. Let to Thomas Bridge at \$2,495.

No. 15,155—From Denver, by Arapahoe, Golden City, Golden Gate and Mountain City to Missouri City,

40 miles, weekly. For this there were sixteen bids, from \$3,650 down. Let to H. B. Wiebling at \$1,000. The contracts are to commence by the advent of the Democratic party in power, on the 1st of July, 1890, or as soon thereafter as practicable. It is provided that if the route from Galeburg, Nebraska, to Denver City is put in operation promptly, I trust the quarter and half dollar edition per letter or paper, on the Pike's Peak, is soon to cease. If it does not, I feel that it is a not been from lack of earnest and persistent effort by Yours truly, SCHUYLER COLFAX, House of Representatives, Washington City, June 15, 1890.

A NEW EMIGRATION.—We find in *Le Nord* an account of a most remarkable migration now going on from the Russian to the Turkish possessions. It shows that the nomadic instincts of the old Scythian race are not yet lost. The whole Tartar population of the Crimea, men, women and children, 300,000 strong are leaving that fertile peninsula for the rigors and hardships of a life in Asia Minor. The Russian Government offers no opposition. Its experience in the Crimean war was sufficient to show that the Tartars never would make good Russian subjects, and in times of danger would always be a cause of weakness rather than of strength. Whole villages rallied to the enemy, serving as entertainers, spies, guides, and as Eupatoriya as light troops. These little treasuries were pardoned by the treaty of Paris, but the fact was not forgotten by the Russian or by the Tartar. A project was started to remove them to a central portion of the Empire, but Alexander has too strong a sense of justice to exile a whole race to what to them would prove a sort of Siberia or Botany Bay. The war, however, roused the national spirit of the Tartars, and the hope which was raised by it of renunciation to a race kindred to them in blood, language and religion, they have at length determined to realize at any cost. The example of the Tcherkeses in the Caucasus, and the artificial excitement raised by Turkish emissaries, decided them to make a general movement this spring, and they have put no seed in the ground. The Russian Government consoles itself with the idea that the extraordinary fertility of the soil of the Crimea will attract German emigrants, who are far more valuable to the State, and under whose industry the peninsula may regain its former state of the granary of the East.

The United States surveying steamer Vixen, Lieut. Commanding Phelps, arrived on Wednesday morning, 6th inst. Norfolk. Lieut. Phelps, commanding, T. Phelps, and Officer of the Vixen, Master, T. J. W. Mordant, T. W. Robbins, Lewis Ketchum, Chief Engineer, E. L. Brady, Assistant Engineer, and others, were on board. A court of inquiry into the circumstances attending the loss of the United States surveying steamer Walker is about to be held. It is understood that the engines of the vessel, which were in excellent order, can be saved. Her topmasts are said to be considerably above water. The surviving seamen of the Walker are at present waiting orders here, and report themselves every morning at the Navy Yard. No account of the missing has yet come to hand.

The Ordnance Department of the Brooklyn Navy-Yard has just completed a Battery of 29 nine-inch guns for the United States ship Cumberland, which has been ordered from Portsmouth, N. H., to this port, where she will be speedily equipped for squadron duty. The Cumberland was recently flag-ship of the African Squadron.

The U. S. sloop-of-war St. Louis, of the Home fleet, will soon be at Pensacola, whither she